

THE FUTURE OF THE DIGITAL AGE: IMPACTS ON MENTAL HEALTH AND OVERALL WELL-BEING

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Purpose: The purpose of the papers is to analyze the effects of social media that have been discussed over the last two decades. Researchers found both positive and negative aspects of social media usage. We cannot deny that everyday activities are associated with social media, the internet, mobile phones, or computers. However, we argue that there are potential benefits (as already demonstrated by current research) to using social media for the general population and vulnerable groups (people with social anxiety, depression, increased loneliness, or others). We also recognize the potential risks and strongly warn against overly using social media.

Design/methodology/approach: We use different articles regarding technology and the impacts of social media on mental health or well-being. We analyze the negative and positive aspects and compare the contemporary research to determine benefit to risk ratio. We focus on contemporary studies because they contain the most actual data.

Findings: Our analysis found that the old research primarily focused on the negative aspects of digital technologies, often ignoring the benefits or potential benefits of using digital technologies for different groups of people.

Research limitations/implications: The research often focused only on specific groups, lacked proper samples, and did not consider a broader range of variables that may impact the conclusions of older studies. We have therefore included a section about the future of research to offer some suggestions.

Social implications: The paper is helpful for organizations focusing on social media and digital technologies, especially when it comes to promoting more positive aspects of using digital tools or social media.

Originality/value: The study compares different forms of research regarding social media/digital technologies, bringing a more balanced approach and analyzing the positive side of the digital age.

Keywords: technology – internet – social media - mental health – well-being.

Category of the paper: Research paper (ethical/philosophy/technology).

Introduction

In contemporary society, we experience new trends online, have access to many social networks, and have easy access to communication to establish new friendships or relationships. It is not simply the availability of options we currently possess but also our ability to adapt and understand how to use them properly that needs to be discussed. We exist bound with our online world, our online profiles, and personal or job-related. We all use some form of digital communication or portfolio, as most jobs require it. Many people argue against the usage of social media, online communication, or other tools that are available online. Throughout the years, the criticism became less severe as more data and research showed a lack of evidence to support overly negative conclusions about the impacts of digital technologies on human beings. Social media, internet usage, and gaming can be dangerous, just like anything, if we do not use them in moderation. We must consider many factors and name specific impacts to test if they are the result of internet usage or if other factors are playing a role in determining these results. In this analysis, we are aiming to search through different literature from the last decade and see how the research changed and what are the most common answers to the impacts of social media, the internet, and the online world on a person.

The early criticism of the digital age

Let us begin with criticism and warning from a famous German neuroscientist and psychiatrist, Manfred Spitzer. He argues in his books against the impacts of digital technologies on our minds and capabilities. His two most famous books with German titles *CYBERKRANK! Wie das digitalisierte Leben unsere Gesundheit ruiniert* and *Digitale Demenz. Wie wir uns und unsere Kinder um den Verstand bringen* both talk about the dangers of social media and its impacts on us and our children, who are especially vulnerable to many different threats in our society. Throughout his work, Spitzer warns us that we must be cautious regarding several things with digital technologies. For instance, he says we must do more than replace education by copying and pasting data and information from websites into our essays and writings. We must learn and use facts in the future (Spitzer, 2014, pp. 59-60). Spitzer's biggest worry is that younger generations won't know how to use and work with texts, hindering their critical thinking and analysis of problems (Spitzer, 2014, pp. 87-88). We recognize that studying using digital tools and the internet can make our lives much easier, especially for many college students. Quicker access to the data, easier way to make notes, or more extensive databases available are just a fraction of what digital technologies offer us regarding research. However, for younger children in elementary or high schools, technology usage could be very

damaging as the children often do not know how to regulate the proper usage or focus on using technology in a desired way for studying. Instead, they use social media, browse the internet, or play games.

Similarly, he argues against using social media instead of face-to-face communication. He argues that we often lie through online communication, make ourselves better than we are, and often feel more powerful because of our anonymity on the internet (Spitzer, 2014, pp. 101-107). In his later work, he expands upon his criticism of using social media instead of face-to-face communication. He argues that we are becoming addicted to different forms of digital technologies. He describes the addiction as dangerous and life-threatening as many people may feel anxiety or frustration when cut out from social media or smartphones (Spitzer, 2016, pp. 84-99). For Spitzer, it is crucial to talk about prevention rather than waiting for the catastrophic results of our behavior and the damage we could do to ourselves and our children. He argues that even though we don't yet have the data with concrete results, it does not mean that we cannot devise a preventive mechanism (Spitzer, 2016, p. 99). He also emphasized that we are prone to anxiety and stress by being too addicted to our technological gadgets. For instance, he argues that we are overloaded with information and constantly fear missing out on some new trend or something similar (Spitzer, 2016, p. 142). In the end, Spitzer argues that we must use our technology in moderation. We must be cautious with children and teenagers because they are prone to get easily addicted as they don't know how and when to limit usage. He says we can try to restrict usage by forbidding the use of phones and social media on our children, educating them, or believing that they will be smart enough to recognize the dangers themselves (Spitzer, 2016, p. 298). Spitzer's contribution as one of the earliest social media critics is significant for advancing research, but we cannot rely only on the early data he provides. We need to improve the methodology to ensure that the conclusions of future studies are as objective as possible.

However, not all researchers agree with these types of conclusions. For instance, a study about the fear of missing out (FoMO) and the impacts of social media on well-being said, "As hypothesized, the present study found that FoMO is positively associated with social media intensity. Although the correlational nature of these studies precludes one from any causal attributions, it is likely that FoMO encourages the use of social media to stay connected. As informed by the Belongingness Hypothesis and Information Foraging Theory, humans have an innate drive to be in relationships with others. Social media is simply an omni-present conduit for attempting to make such connections" (Roberts, David, 2019, p. 5). The authors add, "Study results suggest that, although FoMO is generally negatively associated with social connection and well-being, this is not always the case. Importantly, the results show a more nuanced model of FoMO and its relationships with social media use, connection, and well-being. FoMO drives social media intensity and has an indirect positive effect on social connection through social media intensity, thus suggesting that FoMO may in some instances be a good thing which can lead to greater feelings of social connection" (Roberts, David, 2019,

p. 5). Like everything else, social media and digital technologies present new challenges in our society, and their impacts must be discovered. In many cases, such as with children and teenagers, we must be cautious not to cause severe and extensive consequences on their abilities to learn, think critically, or socialize. Social media can pressure people to be trendy and follow the latest developments or news. Many people may feel pressured to share their experiences and stories to fit in society and stay in touch with others. However, these factors apply to more than just digital technologies and social media. People also want to fit in, be trendy, and follow the latest developments—those who do not often feel stigmatized and fear being labeled weird.

Are digital technologies only bad for us?

Everything depends on how we use social media or technology. We can have positive impacts from using digital tools. It all depends on what sort of activities we use these for. For instance, experts who wrote the article “The Impact of Social Media on College Students” conclude in their study that there “is no simple conclusion to draw from the research about social media networking sites and their impact on college students, other than the sites are certainly a part of today’s student’s lives” (Mastrodicasa, Metellus, 2013, p. 27). We cannot simply ignore the fact that this statement is much more valid ten years later as social media and the role of the internet become much more critical in our society. The authors add, “One must remember that technology is merely a tool for concepts that have been around for decades—communication and connections. How college students use these sites makes all of the difference; some researchers have found positive impacts of various activities, while others have found the exact opposite” (Mastrodicasa, Metellus, 2013, p. 27). The authors in their study mentioned different forms of impacts, from essential well-being to the changes to one’s identity. In a more recent study focused on social media and adolescents’ perspectives, authors found that social media are part of life for adolescents. They mention that throughout the years, there has been a broad focus only on the negative aspects of the internet or social media. This approach created a culture of fear; therefore, many adolescents incorporated this view as their own (O’Reilly et al., 2018, p. 9). Many people often have irrational fears, believe superstitions, or have prejudices against other people. It is not only concerning social media that people have views that might damage themselves and others.

Some studies also focus on active social media use (ASMU) and passive social media use (PSMU). Determining whether the impacts are purely negative or positive and evaluating any form of data on digital technologies is challenging. For instance, authors who wrote the study “The associations of active and passive social media use with well-being: A critical scoping review” argue that “The aim of this scoping review was to investigate the validity of the ASMU and PSMU hypotheses. These hypotheses argue that ASMU (e.g. posting, sending messages)

leads to increases in well-being/decreases in ill-being, because it elicits likes and support, whereas PSMU (e.g. browsing, reading messages) results in decreases in well-being/ increases in ill-being because it induces social comparison and envy” (Valkenburg et al., 2022, p. 540). They add, “our review yielded limited support for both the ASMU and PSMU hypothesis. In fact, 79% of all associations disconfirmed the public ASMU hypothesis, whereas 74% of all associations refuted the public PSMU hypothesis. Likewise, 90% of all associations refuted the private ASMU hypothesis and 80% the private PSMU hypothesis. Finally, like the meta-analyses, we found considerable heterogeneity in the effect sizes of ASMU and PSMU” (Valkenburg et al., 2022, p. 540). Similarly, experts in study oriented on well-being and effects of social media argue that the “majority of adolescents do not experience any short-term changes in well-being related to their social media use. And if they do experience any changes, these are more often positive than negative. Because only small subsets of adolescents experience small to moderate changes in well-being, the true effects of social media reported in previous studies have probably been diluted across heterogeneous samples of individuals that differ in their susceptibility to media effects” (Beyens et al., 2020, Discussion para. 3). If we want to promote safer use of social media, if we focus on cyber-aggression, we also need to focus on teaching people a certain level of behavior and manners online (Mishna et al., 2018, p. 7). Social media usage is essential to consider because how we use technology and social media in our life matters. If we use them responsibly and consider what we share with others, we can find that social media can be helpful in only well-being and mental health as more people are in touch with us and can interact with us even though they might be far away. Digital technologies have many uses for individuals or society.

Mental health and social media

Some studies suggest that many people with mental health issues use social media to share personal experiences or seek support (Naslund et al., 2020, p. 245). The authors of this study add that “we consider three potentially unique features of interacting and connecting with others on social media that may offer benefits for individuals living with mental illness. These include: (1) Facilitate social interaction; (2) Access to a peer support network; and (3) Promote engagement and retention in services” (Naslund et al., 2020, p. 246). Besides these, they thoroughly examine the negative aspects of social media and warn that there are still a lot of potential dangers associated with prolonged use (addiction) of social media or having to deal with hostile interactions/environment (Naslund et al., 2020, pp. 249-250). Overall, there are potential benefits to using social media when dealing with mental health problems. However, we need to be cautious about regulating and managing these options. As the experts point out, “It is critical to monitor the actual content of social media posts, such as determining

whether the content is hostile or promotes harm to self or others” (Naslund et al., 2020, p. 250). Another research paper dealing with people with intellectual disabilities and the use of social media shows that social media have the potential to elevate the feeling of loneliness and isolation from people who have more challenging access to meet with their peers or people with similar diagnoses (Caton, Chapman, 2016, pp. 1-2). The authors emphasize developing the skills necessary to use social media and the internet appropriately and not become victims of scams or mistreatment online (Caton, Chapman, 2016, pp. 7-8). Developing safe spaces, dedicated social networks, or offering digital education are necessary factors to consider while working with people with specific needs who require further support. We must take as many precautions as possible to prevent possible harm and enhance the experience of people with disabilities who might benefit from using digital technologies and social media. The authors find potential benefits such as creating or maintaining relationships, helping with social identity, sharing experiences, or boosting self-esteem by learning new skills or gaining new abilities (Caton, Chapman, 2016, p. 11). They also describe negative aspects or possible for people with disabilities and their encounters on social media. For instance, they worry about the lack of support or availability, lack of literacy or skills, and reluctant behaviors of others to communicate with people with intellectual disabilities (Caton, Chapman, 2016, p. 11). In the end, the authors conclude that we still need to do further research as this field is still unexplored, and we need more data to use all the digital tools at our disposal effectively.

There is a study focusing on eight years of research depicting the impacts of social media on mental health called "Does time spent using social media impact mental health?: An eight year longitudinal study". The authors of this study thoroughly illustrate the possible effects of social media on individual mental health problems. The researchers in this study argue that "the within-person, cross lagged estimates painted a very different picture. Specifically, there were no associations between time spent using social media and mental health across eight years, spanning early adolescence into young adulthood. That is, when individual adolescents used more social media than their own cross-time averages, they did not increase in either depression or anxiety" (Coyne et al., 2020, p. 6). Authors argue that adolescents do not have an increase in depression or similar when they increasingly use social media. They state that adolescents “changes in one (e.g., social media use) do not reliably predict changes in the other (e.g., depression). In other words, although adolescents higher in social media time use have more mental health challenges (in general), their own, individualized fluctuations in social media use do not covary with fluctuations in mental health. This suggests that there may be other processes at play, involving extraneous or confounding variables, that more than likely account for these between-person associations” (Coyne et al., 2020, p. 7). Other experts also argue that there is little evidence to support these claims about the impacts on mental health through social media, and to prove this phenomenon, we need more that would prove the harmful effects (Vuorre et al., 2021, p. 832). The authors argue that we cannot simply blame time spent on social media for increased mental health problems. People often spend time on

platforms that they find exciting or relaxing. We cannot ignore all the other reasons and difficulties people face today and blame digital technologies. The authors do not deny people might become addicted to social media but point out that the general population did not suffer any significant mental health¹ problems from using social media extensively. As we also argue in our paper, social media might be helpful for many people to socialize, maintain personal connections, and help with their overall well-being.

Future of the research

Many authors, experts, and scholars have argued that we have insufficient methods, data pools, and samples for studying social media and their impacts (Scott, Woods, 2019, p. 146). We often approach research from a biased perspective and only focus on the negative aspects of social media, having different presumptions on how they negatively impact the quality of our lives. For instance, Amy Orben, in her studies about teenagers and social media, argues that “the research area examining these crucial questions does not deliver concrete results, but is instead weighed down by a lack of quality that causes the production of much conflicting evidence. Across the board a small negative correlation between digital technology use and adolescent well-being can be located, but it is not clear whether this represents a clear casual relationship or an association driven by third factors. By implementing improvements to the research the effects of digital technologies should increase in transparency, consistency and efficiency” (Orben, 2020, Conclusion para. 1). Similarly, other experts argue that they “urge researchers interested in exploring the social media-well-being relationship to incorporate experimental and longitudinal designs into their work to strengthen their ability to draw inferences about causality. More work is also needed to validate the methodologies we use to study the impact of social media on well-being” (Kross et al., 2021, p. 63). A study focused on the impacts of social media on mental health, especially of youth, deals with potential challenges and opportunities. The author, in the final remarks, argues that “more research is needed as the digital media landscape continues to rapidly evolve. Much of the existing research has relied on self-report measures of adolescent media use, and has been conducted at a single tie point, preventing any definitive conclusions regarding whether media use precedes and predicts mental health outcomes or vice versa” (Nesi, 2020, p. 120). Other authors point out similar problems with contemporary research and methods and argue that the “new decade of

¹ There are other studies that also focus on social media and mental health. For instance, the study „Social Media Use and Mental Health among Young Adults“ (2018) by Chloe Berryman, Christopher J. Ferguson, and Charles Negy focuses on using vaguebooking on social media to get attention. Similarly, the study “The Impact of Social activities, social networks, social support and social relationships on the cognitive functioning of healthy older adults: a systematic review” (2017) by Kelly et al. analyzes the impacts on cognitive functioning by using social media and spending time doing different activities on social media.

research on CMC, social media, and MH should operationalize channels through their core features, tease apart the types of interactions users engage in across channels, and consider the characteristics of messages they send and receive. Ideally, research tests how these interactions and messages are modulated by the core features and affordances of social media” (Meier, Reinecke, 2021, pp. 23-24). Author also adds that “future investigations must continue to move beyond previous notions of 'screen time' as a primary contributor to mental health, and instead consider the specific social media experiences and individual characteristics that may make certain adolescents particularly vulnerable to social media’s positive or negative effects” (Nesi, 2020, p. 120). These authors argue that we must still improve our methods and data collection. It is difficult to do research on such broad topics as digital technologies, and social media, and their impacts on people or mental health. We also need to focus on different aspects of social media and digital technologies rather than just the length of use or type of outlet (social media) we consume.

Conclusion

Our article focuses on analyzing different forms of studies done on the effects of social media and digital technologies. We are fully aware of the fact that there are multiple factors influencing the mental health² of children, teenagers, and adults. We, therefore, do not believe that only social media or technologies are the culprit in the increase of depression or anxiety. There are more factors to be considered, and we also recognize that the current society is building pressure on individuals by utilizing politics and other forms of societal pressure to oversaturate individuals with various information. The workload is also increasing, and working time is becoming so flexible that we can observe a private and work life merging. Besides these, living in Western society has become quite expensive, and many people feel like they are being exploited by working in poor conditions and having to pay increased expenses on necessities. These examples might lead to new problems and increase the depression, stress, or anxiety we are experiencing. We conclude that there might be negative aspects of digital technologies, as demonstrated by Spitzer. Some people might feel pressured by social media and feel depressed or lonely because they heavily rely on digital tools for entertainment. However, not every person is like that, and many people often have prejudices against using technology. These trends and views are constantly changing because the digital age quickly evolves, and people use technology for everyday activities. We argue that social media can also positively impact our lives, mental health, or well-being. It all depends on how we use them.

² For information about mental health and loneliness/isolation, see, for instance, the study „Divergent effects of social media use on meaning in life via loneliness and existential isolation during the coronavirus pandemic“ (2022) by Peter J. Helm and Kenneth Vail.

Some people may even look for people with similar health issues or mental health problems to get help or advice. Many people even use online therapy because they get quicker access to support from therapists through online communication platforms. To properly determine the negative impacts, we need to rework our methodologies, data collection, and sample analysis to avoid oversimplifications or oversights in our results. We strongly advise researchers to keep an open mind during any digital technology research because our digital age is quickly evolving, and we must do thorough work to present the best and most accurate results possible.

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